CULTURAL AND SEX DIFFERENCES IN AGGRESSION: A COMPARISON BETWEEN SPANISH, JAPANESE AND SOUTH AFRICAN STUDENTS

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DECLARATION OF ORIGINAL WORK

I, the undersigned, hereby declare that the work contained in this thesis is my own original work, and that I have not previously in its entirety or in part submitted it at any university for a degree.

ABSTRACT

The primary aim of the study was to investigate cultural and sex differences on different dimensions of aggression as measured by the Expagg Questionnaire (Expagg) and the Aggression Questionnaire (AQ). Both inventories were administered to a sample (N=910) of students from Spain, Japan and South Africa. The results indicated that culture is indeed more predictive of aggression than sex. As expected, the study also revealed that it's influence is not uniform on all the dimensions of aggression investigated. The South African sample revealed the only significant sex difference on the Expagg. The males showed more distinct instrumental representations of aggression than the females, where aggression is seen as a means to reach a desired goal and thus as an effort to gain control. Inter-culturally the main finding was that the South African males and females held predominantly more expressive representations of aggression compared with the other cultures. This indicates that aggression is viewed as an expression of negative feelings and thus as a loss of control. On the Aggression Questionnaire only the South African and Spanish males reported more physical aggression than the females. Cross-culturally the most distinct finding was the overall lower levels of self-reported aggression of the South African females. A discussion of these significant results addressed social, cultural and political factors which may account for the differences. The study provided the prospect of an enhanced cross-cultural understanding of aggression.

OPSOMMING

Die primêre doel van die studie was om kulturele en geslagsverskille te bepaal ten opsigte van verskillende dimensies van aggressie soos gemeet deur die Expagg Questionnaire (Expagg) en die Aggression Questionnaire (AQ). Die vraelyste is op 'n groep (N=910) studente van Spanje, Japan en Suid Afrika toegepas. Die resultate het getoon dat kultuur inderdaad 'n beter voorspeller van aggressie is as geslag. Die resultate het, soos verwag, aangedui dat die invloed van kultuur nie eenvormig inwerk op alle dimensies van aggressie nie. Die Suid-Afrikaanse groep het die enigste beduidende geslagsverskille getoon op die Expagg. Die mans se laer Espagg-tellings dui op instrumentele oortuigings ten opsigte van aggressie. Aggressie word dus beskou as 'n poging om 'n verlangde doelwit te bereik en word ervaar as 'n poging om kontrole te verkry. Die vernaamste kruis-kulturele bevinding was dat die Suid-Afrikaanse groep beduidend hoër tellings as die ander kulture op die Expagg behaal het. Dit dui op ekspressiewe oortuigings ten opsigte van aggressie waar aggressie beskou word as die uitdrukking van negatiewe gevoelens en as 'n verlies van kontrole. Die Suid-Afrikaanse en Spaanse mans het hoër vlakke van fisiese aggressie as die vrouens op die Aggression Questionnaire behaal. Die mees uitstaande bevinding by die kruis-kulturele vergelyking was die algehele laer vlakke van selfgerapporteerde aggressie by die Suid-Afrikaanse vrouens. Die beduidende resultate is aan hand van sosiale, kulturele en politieke faktore bespreek. Die studie het 'n bydrae gelewer tot 'n beter kruis-kulturele begrip van aggressie.

STATEMENT OF DEPARTMENT

This work is the result of a research project, which is of the same extent as that required for a master's thesis.

It is a rule of the Department of Psychology that the report of the research may take the form of an article which is ready for submission for publication to a scientific journal.

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David; today, tomorrow and always, it's your love that gets me through.

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1. Introduction

Aggressive behaviour is a complex phenomenon with numerous antecedent and consequent variables causing and maintaining this type of behaviour. Many investigators have suggested that aggressive behaviour is strongly connected with cultural and social factors, but its influence is not uniform on all dimensions of aggression (Andreu, Fujihara & Ramirez, 1998). The primary aim of the present study therefore was to investigate socio-cultural and sex differences in social representations of aggression and different types of aggression by comparing three different cultures.

While similarities may exist among different cultures as to what is acceptable regarding aggressive behaviour many differences have been found in a number of cross-cultural studies (Andreu, et al. 1998; Archer & Haig, 1997a, 1997b; Eagly & Steffen, 1986; Fujihara, Kohyama, Andreu & Ramirez, 1999; Ramirez, Sancho, Andreu & Fujihara, 1996). Furthermore, it has been established that aggressive behaviour shows greater variance across cultures than between sexes (Andreu et al., 1998; Burbank, 1987; Rohner, 1984). Fujihara et al. (1999) emphasize the potential of cross-cultural research to enhance clarity in understandings of aggression, "although the influence of the psychosocial environment on behaviour cannot be disentangled from the biological one, cross-cultural studies, with their eventual similarities and differences, can help us to understand which bio-social processes are involved in aggressive behaviour" (p3). In addition, investigating gender and cultural factors simultaneously is recommended, as culture and gender are more than the sum of their parts, as pointed out by Hofstede, (1980), who remarked that together, they make up a more complex combination of social influences.

Increasing incidents of aggressive behaviour are the macabre daily reality for many

South Africans and have created a society where many spend significant amounts of time, money and energy to protect themselves from this reality (Glanz & Spiegel, 1996). Van der Schyff (1995) emphasized the need for more research on aggression and its link to violence within the political, cultural and religious systems in South Africa. The present study aimed to contribute to the international body of research investigating cultural and sex differences in aggression as it was included in a collaborative international project investigating attitudes and beliefs about aggression in Spanish, Japanese and South African populations. The significance therefore of the present study was paramount for a better understanding of aggression in general, cross-culturally as well as in the South African context.

2. Theoretical concepts

2.1 Aggression

Bandura (1973) noted that to study aggression is to enter a "semantic jungle", while Geen and Donnerstein (1998) cautioned that when defining aggression, a complex set of dimensions must be considered, including attitude (hostility), emotion (anger) and behaviour. This complex interplay of thoughts, emotions and behaviour determines whether and to what degree we aggress against others. Geen and Donnerstein argue that a working basis for understanding aggression should include three aspects: the delivery of noxious or harmful stimuli, the intent to do harm and the fact that the attack has a greater than zero probability of being successful. This of course is a very broad definition and can cover various subcategories of aggressive behaviour, such as physical/verbal aggression, direct/indirect aggression, individual/group aggression and legitimate/illegitimate aggression.

A further less known distinction becomes apparent in the literature where aggression

is dichotomised as expressive (hostile) or instrumental (goal-driven). According to Campbell, Muncer and Coyle (1992) this distinction lies primarily therein that the motive for the aggressive behaviour may either be to harm the other person as an expression of negative feelings (expressive aggression) or to reach a desired goal by means of an aggressive act (instrumental aggression). Theories related to expressive aggression focus upon intra-psychic determinants of aggression within the individual in contrast to theories related to instrumental aggression that focus on the interpersonal consequences of aggression for the aggressor.

Theories related to expressive aggression include the Freudian concept of Thanatos as a redirected death instinct (Zillman, 1979), the frustration-aggression hypothesis (Dollard, Doob, Miller, Mowrer & Sears, 1939), neopsychoanalytic explanations of deficient ego function (Aichhorn, 1955) and explanations in terms of faulty behavioural inhibition (Eysenck, 1964) or low self-control (Gottfriedson & Hirschi, 1990). These theories share a common concern with the build up of tension, stress or arousal and its consequent discharge through the expression of negative feelings. This discharging can be viewed as an autonomic process or as a failure of normally learned processes of behavioural inhibition (Campbell et al., 1992).

Theories related to instrumental aggression are united by a common concern with the learned benefits of aggression for the aggressor. Operant theorists construct their arguments in the language of reinforcement: Bandura's (1973) social learning theory introduced the notion of self-reinforcement and the importance of vicarious reinforcement as the precursor of this form of self-regulation; Tedeschi , Smith and Brown (1974) suggested that aggression is actually a form of social influence, where threat or the use of force are means of co-ercing compliance from others and Black

(1983) viewed violence as a means of social control among those who lack status and legitimate power in the world. Aggression is thus seen as a direct means of control for those who do not have access to the legal system to remedy personal affronts and injustices. Impression management approaches (Felson, 1982; Toch, 1969) shared an emphasis upon aggression as a means of establishing and maintaining public face and private self-esteem. For others, this function of aggression was intimately tied to sub-cultures of violence who condone and encourage such behaviour as a legitimate form of dispute resolution (Wolfgang & Ferracuti, 1976). These theories, despite their diversity of theoretical language and origins, all agree that instrumental aggression produces pay-offs whether they are extrinsic (material or social benefits) or intrinsic (gratification of power, or for its own sake).

2.2 Social Representations / Beliefs

Because beliefs about aggression are strongly embedded within the social context of our lives, researchers started to investigate what powerful effect, be it instrumental or expressive social beliefs, have on aggression (Campbell & Muncer, 1987). Campbell and Muncer also developed a questionnaire (Expagg) based on classifying responses on aggression as either instrumental or expressive (linked to the two-dimensional theoretical approach as discussed). Whether a respondent chooses to endorse items of one dimension more than another allows the researcher to comment on that respondent's dominant social representation of or belief about aggression. In the present study this dichotomy (instrumental/expressive) has also been utilised by administering the Expagg. Before expanding further on the concepts of instrumental and expressive social representations or beliefs, the terms "social representations" or "social beliefs" need to be elaborated on.

Social representations or beliefs are implicit models or theories held by lay people and exchanged in communication. They are used to interpret and to generate social events and phenomena and may be referred to as culturally and historically located explanatory frameworks which include attitudes, values and emotions towards the phenomena in question (Campbell & Muncer, 1987). According to the authors the concept of social representations, coined by Moscovici, was originally used to capture the middle ground between sociology and psychology by focusing upon social representations which are shared by many people and as such make up the social reality which influence their behaviour. Moscovici (quoted in Farr & Moscovici,1984) suggested that different social groups might have different behaviour patterns because of their holding of different social representations.

The hypothesis that men and women hold distinct social representations of aggression arose from a preliminary study of gender differences in social talk about aggression (Campbell & Muncer, 1987). The content analyses indicated clear thematic gender differences. Women viewed aggression as a result of the loss of control stemming from a build up of stress. Their expression of aggression took the form of crying as often as fighting and was uniformly seen as a negative experience. Men, by contrast, viewed aggression as the exercise of control over others triggered by challenges to their self-esteem or public integrity. Whether the aggression led to physical violence depended upon characteristics of the opponent and fighting was often seen as a positive experience. The authors then applied the term "social representation" to these two contrasting sets of beliefs to denote the sense of shared social beliefs they entail. The distinction between the social representations of aggression made by the subjects corresponded to the distinction made between expressive and instrumental aggression. The study suggested that women view their own and other' s aggression as expressive

acts and men view aggression as an instrumental act. In a follow-up study (Campbell et al., 1992), a sample of American college students aged 18 to 21 years completed the Expagg and the results also supported their initial findings. Campbell et al. (1992) suggested that further research was required to assess the extent to which social groups can be defined on their shared social representations.

Archer and Haigh (1997a) then transformed the original Expagg questionnaire (20 items) into a 40 item questionnaire (the Revised Expagg) and replicated Campbell et al.'s (1992) study, using a sample of British undergraduate students. Paty (1998) also used a French version of the Revised Expagg and investigated the perceptions of aggression of French teachers against the background of increasing violence in French schools. The results of both studies (using different European samples) supported those of Campbell and Muncer (1987) and Campbell et al. (1992) where men presented a representation of aggression clearly less expressive than women. Archer and Haigh (1997b) also used a sample of prisoners and investigated the association between men and women's social representations of aggression and their self-reported levels of aggressive behaviour. The male prisoners showed an instrumental social representation of aggression that were strongly associated with levels of self-reported physical aggression. Although Campbell and Muncer refer to "social representations", Archer and Haigh prefer to use the term "beliefs" in their research of the same phenomena. Both terms, however, refer to the way in which individuals reflect on their own aggression. For the sake of uniformity the term, "social representations" was used in the present study.

2.3 Culture and Gender Roles

The literature on aggressive behaviour sharpens the focus on the role of cultural norms

and societal values in the expression of aggression. There is consensus of opinion by different researchers as to what the concept of culture encompasses (Hofstede, 1996; Rohner, 1984; Segall, Dasen & Berry, 1999) in that norms, rules and shared meanings direct and determine behaviours within a particular culture. It has been established that, for example, the norms governing aggression differ considerably between cultures (Andreu et al, 1998; Österman, Björkvist & Lagerspetz, 1998).

Hofstede (1996) views gender as one of the "four dimensions of culture" (p1). This serves to reinforce that gender and culture are more effectively studied together as gender is understood to be one of the main differentiating factors between national cultures. Campbell (1999) also accentuates the relationship between culture and gender in her definition of culture as "ascribing different meaning and value to the same behaviour when it is performed by men and women" (p211). Aggression is sustained or inhibited by the social roles occupied exclusively by persons of each sex.

The male gender role includes norms encouraging many forms of aggression eg. toughness, and violence. Research on gender stereotypes suggests that men are not only more aggressive than women but also more extreme on related qualities of assertiveness and competitiveness. These qualities are seen as more desirable in men, and men were seen to hold more favourable attitudes towards aggression than women. The female gender role, in contrast, emphasize communal qualities such as sensitivity incompatible with aggressiveness towards other people (Campbell, 1999; Eagly & Steffen, 1986). Campbell argues from an evolutionary perspective, that for females the cost of aggression is much higher than for males. The female's greater importance in the rearing of children makes potentially lethal acts of aggression too costly. The rewards for males are usually higher because of the greater resource-status link

(victorious acts of aggression lead to greater access to resources, including females and status amongst peers).

Although, Daly and Wilson (1988) comment that in most social milieus a man's reputation still depends in part on the maintenance of a credible threat of violence, Campbell and Muncer (1994) state that lately less traditional forms of the male gender role de-emphasise aggressiveness and support communal qualities and emotional expressiveness. Similarly, progressive support for women's assertiveness in recent years may suggest that the female gender role, like the male gender role, conveys complex messages about aggression and related behaviours.

3. Literature review

In a cross-cultural survey by Rohner (1984) of 101 societies, substantial worldwide cultural and sex variations in aggression were found, and this survey further revealed that **culture** is more predictive of levels of individual aggression than sex.

Hofstede (1980) in his seminal cross-cultural study provided some type of conceptual framework for attempting to understand perceived differences amongst cultures in social psychological research. Analysis of his sample of 50 different national cultures, which included South Africa, allowed him to classify the various countries along four psychological dimensions, namely, power-distance, uncertainty-avoidance, individualism-collectivism and masculinity-femininity. The dimension, masculinity-femininity, is perhaps of the most significance to the present study. Hofstede points out that this dimension refers to whether an individual or country are about ego enhancement (masculine) or relationship enhancement (feminine). This may be broadly comparable with the distinction between instrumental and expressive related theories

of aggression, where instrumental representation of aggression would be linked to the masculinity value and expressive representation of aggression to the femininity value. In a follow-up study by Hofstede (1996) Japan and South Africa emerged as more masculine (an emphasis on male assertiveness and female modesty), while Spain was rated somewhere between the masculine and the more feminine, which characterises countries where social gender roles overlap. The dimension of uncertainty-avoidance may also play a predictive role as Hofstede points out that in high uncertainty-avoidance cultures (Japan and Spain), aggressive behaviour of self and others is acceptable, however individuals prefer to contain aggression by avoiding conflict and competition. South Africa on the other hand, scored higher on this scale, indicating a less noticeable focus on planning and stability as a way to deal with uncertainty and less acceptance of aggression of self and others.

Research by Ramirez et al. (1996) on anger and aggression using samples of Spanish and Japanese students revealed that the Japanese showed significantly higher levels of proneness to aggression than the Spaniards although they did not differ on levels of anger showed. No significant gender differences were found, however, male and female students in Japan emerged as having higher aggression levels than the students from Spain. Ramirez et al. concluded that the higher level of aggression found within the Japanese sample may be linked to the fact that Japan's so called harmonious collective culture is paradoxically connected to a history of conflict and it may be that the ordinary cultural patterns which normally serve to enhance group solidarity and reduce conflict, could exacerbate within group conflict. They also stated that culture influences the way members of any given nationality express emotions and the open expression of emotionality is stereotypical of Latin societies (Spain), where verbal expression of emotions is widely accepted. Similar research by Fujihara et al. (1999), using Japanese,

Spanish and American students, revealed that Japanese students showed a greater acceptance of physical aggression (particularly defensive aggression, or aggression in retaliation to a threat), than the Spaniards. The Japanese also emerged as more accepting of direct verbal aggression than the other two cultures, but Spanish students showed significantly greater indirect verbal aggression than the Japanese. According to Hofstede (1996) interdependent cultures (collectivist cultures), such as Japan, would be more permissive to the expression of emotions related to anger than independent cultures (individualistic cultures), such as Spain. As far as could be ascertained, no research comparing South Africans with other cultures regarding aggression types and beliefs has been undertaken.

Psychological research, popular media and our own everyday understanding connects aggression very closely to one's sex (Cohen, 1988). The fact that we expect and find overtly aggressive behaviour more acceptable among men than women is embodied in public stereotypes of male and female behaviour (Broverman, Vogel, Broverman, Clarkson & Rosenkrantz, 1972). Campbell (1999) offers an evolutionary perspective to account for male and female differences in aggressive behaviour highlighting the costs and benefits of aggression for males and females, while White (quoted in Geen & Donnerstein, 1983) suggests that only two observations can be made universally regarding sex and aggression. Firstly, all cultures are sexually dimorphic, and females hold a lower status in all cultures. Secondly, although differences between men and women in aggression show up regularly, they are often small. Since all societies are sexually dimorphic and most socialise their children in preparation for adult roles, it follows that males would have more opportunities for learning and performing aggressive acts. This is especially true when we consider that the socialization of boys and girls is associated with the tasks they are assigned and the nature of social

interactions they most frequently have. Such a process would magnify any predisposition in males to be more aggressive than females. Males are socialised to be masculine (dominant, use forceful, assertive language) and females are socialised to be feminine (passive, nuturant, empathetic, use of more passive, tentative language). In discussing cultural factors affecting male and female aggression, Campbell (1999), comments on how culture acts as a complementary force to biological and evolutionary processes, "socialising" the frequency of aggressive behaviour in each sex. She argues that the cross-cultural prevalence of patriarchy, defined as a system in which the overwhelming number of upper positions in hierarchies are occupied by males, may have stigmatised women's aggression thus leading women to offer exculpatory accounts for their aggression. Men's aggression has been valorised, while women's aggression as been pathologised and seen to be in violation of sex-appropriate behaviour. Campbell also comments that the increase in female aggression seen especially in Western society, may be linked to the improved position of women in those societies, where aggression may be seen as "in" or modern and where models of female aggression are available to younger women.

One of the strongest cross-cultural principles of aggression is that males display more aggression than females (Moghaddam, Taylor & Wright, 1993). Ramirez (1993) explained that there is an additive or interaction effect between biological (sex hormones) and environmental factors (sex-rearing differences) which accounts for the cultural differences in men and women's aggressiveness. Research by Barry, Josephson, Lauer and Marshall (quoted in Segall et al., 1999) showed that in the 150 societies that they scored on the inculcation (deliberate teaching and encouragement) of aggression amongst children, sex differences across these societies were consistent, that is, more inculcation of aggression for boys than for girls.

In research done to assess different types of aggressive behaviour Buss and Perry (1992) found that men were more physically aggressive, verbally aggressive and hostile than women, while no sex differences were found for anger. They integrated this data by suggesting that women become just as angry as men and may or may not inhibit the expression of this anger. Archer, Kilpatrick & Bramwell, (1995), Fujihara et al. (1999) and Ramirez et al. (1996) also found in their studies with college students, that males scored significantly higher than females on physical and verbal aggression and also hostility but only marginally higher regarding anger. Andreu et al. (1998) also found more physical and verbal aggression amongst males than females.

Research on gender roles in the three cultural groups involved in the present study reveals various trends. According to Hofstede (1980) Spain would be likely to represent a culture where gender roles are more flexible, where feminine and masculine traits characterise both sexes. Accordingly Arrindell et al. (1997) found an equitable distribution of masculine and feminine traits in members of both sexes, in their sample of 925 Spanish students. Although one could argue that patriarchal influences are also found in the Spanish culture, Gilmore (1990) points out that this influence does not pervade all arenas of Spanish society. Gilmore delineates the domestic sphere as a domain where women are the possessors of power and control. Given this opportunity in which their power can be recognised on at least the domestic front, the expression of aggression is validated and thus can be considered in a wider social context. Ramirez (1993) showed how emotionality (feminine trait) seemed to be a predominant consideration in Spanish populations' expression of aggression. This coincides with the stereotype of "being emotional, socially open" and "vocal" (p 195). Andreu et al. (1998) admitting the more flexible gender roles, found in their study with Spanish and Japanese students, that the Spanish held a more expressive social representation of

aggression than the Japanese. Hofstede (1980) predicted more traditional gender roles for the Japanese society. However, Yang (1986) describes a process of modernization in Eastern countries which leads to greater gender equality and also to changes in the nature of gender roles. This in turn, leads to greater gender role overlap, in which it is advantageous for men and women to have less distinctive gender role characteristics. Suzuki (1991) and Shirakawa, Shiraishi and Sukemune (1992) concurred with Yang and found that gender role beliefs in Japan were changing and becoming less traditional, especially that women exhibit more liberal attitudes towards women's roles. In fact, less traditional attitudes towards women's roles have been endorsed by women in a variety of cross-cultural studies (Gibbons, Hamby & Dennis, 1997).

Research on aggression in South Africa, focused on males and females from upper socio-economic levels, is limited. Wessels (1984) investigated levels of aggression among English-speaking white adolescent females and found the aggression levels to be average, neither very high nor very low. Van der Schyff (1995) applied the Aggression Questionnaire to white female university students and also found an average to low level of self-reported aggression. Botha and Mels (1990) also focused on white adolescents to study the stability of aggression over time (a four year period). They found the expression of aggression to be stable over time and that males showed significantly more physical and verbal aggression than the females.

Hofstede (1980) described the South African society as a national culture characterised by traditional gender roles. In South Africa, research on gender roles and gender behaviour has revealed that traditional gender roles may still be prevalent among most cultural groups. Cronje and Venter (1973), Duckitt (1983) and Lemmer (1989) argue that the patriarchal structure within the South African society is so rigid that its influence is

felt even within the domestic arena. Robinson's (1990) exploratory investigation into gender stereotypes in a population of South African university students, revealed that the typical young, white South African woman was expressive and empathic, nuturant and caring, both emotionally and physically. Underlying this, a submissiveness and tendency to give in to the desires of others, especially men were found. The typical young, white South African man emerged as physically self-sufficient, emotionally self-contained and independent, whose self-assertion could become aggressive (using physical force, verbal abuse or threats) to get their own way.

Prinsloo (1992) investigated the tenacity of sex–role stereotypes amongst South African students. Findings showed that white respondents rated aggressiveness as socially undesirable for females. A further important conclusion of Prinsloo's study was the finding of a tendency among more affluent, middle-class white students to rate sex-role stereotypes in a sex-typed, traditional manner (women in a socially supportive role to men). Prinsloo suggests that this may underlie a tenacity of the traditional sex-typed behaviour for the white group within South African society, reflecting an inflexibility in the face of changing circumstances. Epstein (1998) contends that white women have, on the whole, been "protected" by what she refers to as ways of keeping gender roles traditional. She explains that, in South Africa, white men are seen to be the "chivalrous protectors" and women, the "submissive protected". Dimati (1998) found in her cross-cultural study investigating gender role attitudes and coping amongst black and white South African working women, that traditional gender role attitudes were positively correlated with age. The younger the respondent, the more traditional her gender role attitude was found to be.

Spiegel (in Glanz & Spiegel, 1996) claims that beneath the culture of violence in South Africa lay a power hierarchy which served to maintain dominance over the

disempowered. A dominant theme is that of a patriarchal and authoritarian system in which both gender and race were seen as valid categories for the distribution of power. Several researchers have noted that South African society has been powerfully shaped by the notion that authority and control naturally reside in men (Cronje & Venter, 1973; Duckitt, 1983; Glanz & Spiegel, 1996; Lemmer, 1989). Although culture seems to be a longitudinally stable form of social teaching and guidance, social norms may change and with them the cultural appropriateness of various forms of aggressive behaviour. The possibility of further change in political and social environments is pertinent to the investigation of aggressive behaviour in South Africa.

To conclude, the mental health profession is increasingly being called upon to alobarate on aggressive behaviour and to make more accurate predictions of future anti-social behaviour. Cultures form their own set of norms and values to which the individuals are exposed. Campbell (1999) pointed out that there are strinkingly different construals of the self, of others and of the independence of the different construels in different cultures that have a set of spesific consequences for cognition, emotion and motivation. It is not surprising therefore that communication between people of different cultures and sex can sometimes be so difficult. In order to gain a more comprehensive perspective on variables that influence the expression of aggression the present study was designed in collaboration with co-researchers in Spain and Japan.

4. Hypotheses

In each hypothesis differences between men and women as found **within (intra)** each culture and **between (inter)** cultures are implicated.

4.1 There will be significant sex differences in scores on the Expressive scale of the Expagg

4.2 There will be significant sex differences in scores on the Instrumental scale of the Expagg.

4.3 There will be significant sex differences in scores on the four subscales of the Aggression Questionnaire, namely Physical Aggression, Verbal Aggression, Anger and Hostility.

4.4 There will be significant intercorrelations between scores on the Instrumental and Expressive scales of the Expagg and the four subscales of the Aggression Questionnaire.

5. Method

5.1 Participants

The participants were university students, enrolled in undergraduate or introductory level psychology courses at the Complutense University, Madrid, the University of Kwansei Gakuin, near Kobe and the University of Stellenbosch. The sample comprised of 910 students: 203 males and 206 females from Spain, 100 males and 100 females from Japan, and 99 white males and 202 white females from South Africa. Participants in the study were aged between 17 and 25 years (M = 20.5 ; SD = 2.11).

5.2 Questionnaires

To address the facets of aggression investigated in the present study, two different self- report aggression inventories were applied.

5.2.1 Expagg Questionnaire. The Expagg Questionnaire (Expagg) was developed by Campbell and Muncer (1987) to measure a participant's social representation of aggression on a single dimension that ranges from instrumental to expressive. This inventory aims to assess masculinity and femininity as different dimensions, defined primarily as instrumentality and as expressiveness respectively, in accordance with the

two-dimensional theoretical approach. The Expagg has a 20-item forced-choice format.

Endorsing items from the Instrumental scale would suggest a stance on aggression that coincides with the belief that one's aggression is caused by the non-compliance of others or a challenge to one's integrity and is accompanied by emotions of anger, rage, fear of powerlessness, triumph or despair. Test items that load unto the instrumental factor are, for example:

- If someone challenged me to fight in public, I'd feel cowardly if I backed away.
- If I hit someone and hurt him, I feel as if he was asking for it.

Endorsing items from the Expressive scale would suggest a stance on aggression that coincides with the belief that one's aggression is caused when internal controls are low and is accompanied by emotions of distress, fear of losing control, guilt and anxiety (Campbell et al., 1992). Test items that load onto the expressive factor are, for example:

- If someone challenged me to fight in public, I'd feel proud if I backed away.
- If I hit someone and hurt him, I feel guilty.

The expressive and instrumental items are randomly distributed within the questionnaire. The questionnaire is scored by assigning a value of one to instrumental and two to expressive responses. A high score indicates a predominantly expressive mode of responding. Each item is also rated along a 5 point Likert scale (ranging from 1=never to 5=very often). The reliability of the 20 - item Expagg was assessed using Cronbach's alpha which was found to be .72 (Campbell et al., 1992) and .79 (Campbell, Muncer, McManus & Woodhouse, 1999).

A factor analysis showed a general instrumental-expressive factor with significant loadings for most items (Campbell et al., 1992).

5.2.2. Aggression Questionnaire. Buss and Perry (1992) devised the Aggression Questionnaire (AQ) to measure different types of aggressive behaviour. This self-report style questionnaire is an improvement on the Hostility Inventory (Buss & Durkee, 1957) which lacked psychometric soundness. The 29 items measure self-reported types of aggressive behaviours. It is divided into four subscales measuring Physical aggression (9 items), Verbal aggression (5 items), Anger (7 items) and Hostility (8 items). Each item is rated on a 5 point Likert scale ranging from 1 (Never applies to me) to 5 (Very often applies to me).

Aggressive behaviour is seen to consist of three inter-related components, namely the motor, affective and cognitive components. Physical and verbal aggression are seen as the motor component of aggression and involve hurting or harming others through words or deeds. Anger involves the physiological arousal and preparation for aggression and represents the emotional or affective component of aggressive behaviour. Hostility consists of feelings of ill will and injustice and represents the cognitive component of aggressive behaviour (Buss & Perry, 1992).

Harris (1997) reports that the Aggression Questionnaire is strongly related to other self-report measures of aggression as well as behavioural indicators of aggressive behaviours, suggesting that the measure has construct validity. Buss and Perry (1992) reported an alpha co-efficient of .89 for the total scale, with internal consistency reliabilities for the subscales ranging from .72 to .82.

5.3 Procedure

Informed consent was obtained from all the participants in the different countries, who were also assured of anonymity in completing the two inventories. The inventories were administered in Spain and Japan by the co-researchers of the project. The South African students completed the inventories in either English or Afrikaans. Where necessary, the researcher helped to clarify instructions and/or items.

6. Results

A Multivariate Analysis of Variance (MANOVA) was conducted to assess the effects of culture and sex (the two independent variables) on the participants' scores on the Instrumental and Expressive scales of the Expagg and on the four subscales (Physical aggression, Verbal aggression, Anger and Hostility) of the Aggression Questionnaire (the six dependent variables).

The mean scores for the three cultural groups and the two sexes on the dependent variables are presented in Table 1.

Table1

Descriptive Statistics for Culture and Sex on Aggression.

			Expagg		Aggression Questionnaire			
N	Culture	Sex	Instr. M	Expr. M	Phys. Agg. M	Verbal Agg. M	Anger M	Hostility M
203	Spain	male	39,074	73,542	19,754	15,133	19,113	20,557
100	Japan	male	42,890	71,520	20,740	14,770	17,720	21,530
99	S-Africa	male	34,757	82,697	19,182	13,556	16,737	17,222
206	Spain	female	41,539	76,388	16,019	14,767	20,243	22,209
100	Japan	female	42,190	71,900	18,940	14,170	18,540	21,240
202	S-Africa	female	28,688	92,787	14,847	12,297	16,525	16,827

Note. Instr. = Instrumental, Expr.= Expressive, Phys. = Physical, Agg. = Aggression

Table 2 contains the results of the MANOVA conducted to determine significant differences between the three cultural groups and two sexes regarding the six dependent variables.

Table 2

Results of the Manova for Culture and Sex

Effect	Wilk's Lambda	df1 Effect	df2 Error	p
Sex	0,893	6	899	0,00
Culture	0,631	12	1798	0,00
Sex & Culture	0,930	12	1798	0,00

Table 2 indicates that a significant difference was found between the three cultural groups and two sexes with regard to the six dependent variables. The two-way culture and sex effect was also found to be statistically significant (Wilk's Lambda = 0,930, df=12, 1798, p=0,00). It is evident that sex differences on these variables cannot be meaningfully understood separately from the cultural differences. Univariate F-Tests were undertaken to determine for which of the six dependent variables there was a cultural or sex difference. The results are presented in Table 3.

Table 3

Univariate F-Test Results for Culture and Sex Differences on the Dependent Variables

Variable	Mean sqr Effect	Mean sqr Error	F	p
Instrumental	1171138	67,878	17253,54	0,00
Expressive	4902876	510,620	9601,82	0,00
Physical Agg.	264420	39,037	6848,83	0,00
Verbal Agg.	159994	17,543	9120,20	0,00
Anger	264420	27,040	9778,57	0,00
Hostility	318978	35.696	8935,92	0.00

Note. Agg. = Aggression

A significant difference was found for each of the six dependent variables. A significant difference was found for Physical aggression (F[1, 904]=6848,83, p=0,00) ; Verbal aggression (F[1, 904]=9120, 20, p=0,00); Anger (F[1, 904]=9778,57, p=0,00); Hostility (F[1, 904]=8935,92, p=0,00); Instrumental total score (F[1, 904]=17253,54, p=0,00) and the Expressive total score (F[1, 904]=9601,82, p=0,00).

Post hoc comparisons (using Scheffe's test) were undertaken to determine which of the three cultural groups and two sexes differed from each other on the various dependent variables. In each case, significant differences between males and females as found **within (intra-cultural)** each culture and also **between (inter-cultural)** cultures are reported.

The results of the analysis pertaining to instrumental scores on the Expagg are reported in Table 4.

Table 4

Scheffe's Post Hoc Comparison:Instrumental Scores: Culture and Sex Differences

			Instrumental Scores				
Culture	Sex		{1}	{2}	{3}	{4}	{5}
Spain	male	{1}					
Japan	male	{2}	*				
S-Africa	male	{3}	*	*			
Spain	female	{4}					
Japan	female	{5}					
S-Africa	female	{6}			*	*	*

* $p < 0,05$

Table 4 indicates that on the Instrumental scale, the males from South Africa scored significantly higher than females from South Africa. Males from Spain and Japan scored significantly higher than males from South Africa. Males from Japan scored significantly

higher than males from Spain. Females from Spain and Japan scored significantly higher than females from South Africa.

The post hoc comparison between the three cultural groups and two sexes with regard to the expressive scores of the Expagg are presented in Table 5.

Table 5

Scheffe's Post Hoc Comparison: Expressive Scores :Culture and Sex Differences

		Expressive Scores				
Culture	Sex	{1}	{2}	{3}	{4}	{5}
Spain	male {1}					
Japan	male {2}					
S-Africa	male {3}		*			
Spain	female {4}					
Japan	female {5}					
S-Africa	female {6}			*	*	*

* $p < 0,05$

As shown in Table 5, South African females scored significantly higher on the Expressive scale than males from South Africa. Males from South Africa scored significantly higher than males from Japan. The analysis also revealed that the females from South Africa scored significantly higher than females from Spain and Japan.

The results of the post hoc comparison between the three cultural groups and two sexes with regard to the Physical aggression scores of the Aggression Questionnaire are reported in Table 6.

Table 6

Scheffe's Post Hoc Comparison: Physical Aggression: Culture and Sex Differences

			Physical aggression				
Culture	Sex		{1}	{2}	{3}	{4}	{5}
Spain	male	{1}					
Japan	male	{2}					
S-Africa	male	{3}					
Spain	female	{4}	*				
Japan	female	{5}				*	
S-Africa	female	{6}			*		*

*p < 0,05

Table 6 illustrates that the males from Spain and South Africa scored significantly higher on the Physical aggression scale than females from Spain and South Africa. Females from Japan scored significantly higher than the females from Spain and South Africa

The post hoc comparison between the three cultural groups and two sexes with regard to the Verbal aggression scores on the Aggression Questionnaire appear in Table 7.

Table 7

Scheffe's Post Hoc Comparison: Verbal Aggression: Culture and Sex Differences

			Verbal Aggression				
Culture	Sex		{1}	{2}	{3}	{4}	{5}
Spain	male	{1}					
Japan	male	{2}					
S-Africa	male	{3}					
Spain	female	{4}					
Japan	female	{5}					
S-Africa	female	{6}				*	*

* $p < 0,05$

It is evident from the results displayed in Table 7 that the only significant difference found was that the females from Spain and Japan scored significantly higher on the Verbal aggression scale than the South African females.

The results of the analysis pertaining to the Anger scores on the Aggression Questionnaire are reported in Table 8.

Table 8

Scheffe's Post Hoc Comparison: Anger: Culture and Sex Differences

			Anger				
Culture	Sex		{1}	{2}	{3}	{4}	{5}
Spain	male	{1}					
Japan	male	{2}					
S-Africa	male	{3}	*				
Spain	female	{4}					
Japan	female	{5}					
S-Africa	female	{6}				*	

* $p < 0,05$

It is evident from Table 8 that males from Spain scored significantly higher on the Anger scale than the males from South Africa. Females from Spain scored significantly higher than the females from South Africa.

Table 9 contains the post hoc comparison between the three cultural groups and two sexes regarding the Hostility scores on the Aggression Questionnaire.

Table 9

Scheffe's Post Hoc Comparison :Hostility: Culture and Sex Differences

			Hostility				
Culture	Sex		{1}	(2}	{3}	{4}	{5}
Spain	male	{1}					
Japan	male	{2}					
S-Africa	male	{3}	*	*			
Spain	female	{4}					
Japan	female	{5}					
S-Africa	female	{6}				*	*

* $p < 0,05$

It is evident from Table 9, that the males from Spain and Japan scored significantly higher on the Hostility scale than the males from South Africa. Females from Spain and Japan scored significantly higher than the females from South Africa.

An investigation of the relationship between the six dependent variables was conducted. The extent to and manner in which the Instrumental and Expressive total scores of the Expagg and the total scores on the four subscales of the Aggression Questionnaire (Physical aggression, Verbal aggression, Anger and Hostility) were related, was investigated.

Table 10 contains the intercorrelation coëfficients between the six dependent variables.

Table 10

Correlation Coëfficients Between the Dependent Variables

	Aggression Questionnaire				Expagg	
Variable	Phys. Agg	Verbal Agg.	Anger	Hostility	Instr.	Expr.
Physical Agg.	1,000					
Verbal Agg.	0,404*	1,000				
Anger	0,459*	0,509*	1,000			
Hostility	0,382*	0,361*	0,488*	1,000		
Instr.	0,352*	0,256*	0,311*	0,356*	1,000	
Expr.	0,017	0,100*	0,170*	0,083*	-0,114*	1,000

*$p < 0.05$

Note. Phys. = Physical, Agg. = Aggression, Instr. = Instrumental, Expr. = Expressive

Table 10 indicates that Physical aggression is significantly positively correlated with Verbal aggression (r=0,404, p<0,05), Anger (r=0,459, p<0,05), Hostility (r=0,382, p<0,05) and the Instrumental total score (r=0,352, p<0,05). Verbal aggression, Anger and Hostility are significantly positively correlated with all of the other variables. The Instrumental total score is significantly positively correlated with the four aggression subscores, but is significantly negatively correlated with the total Expressive score. The

Expressive total score is significantly positively correlated with Verbal aggression, Anger and Hostility.

7. Discussion

The significant findings for each of the six dependent variables are presented in the following order to facilitate meaningful comparisons and discussion: significant intra-cultural differences are discussed, followed by the significant inter-cultural differences.

Intra-culturally, significant sex differences were found between South African males and females on the two subscales of the Expagg (see Tables 4, 5). The males held a significantly more instrumental representation of aggression than the females, while significantly more females endorsed an expressive representation of aggression. This finding supported the first two hypotheses of the present study. Although the Expagg has not been administered to a South African sample, prior to the present study, other international researchers, namely, Andreu et al. (1998), Archer and Haigh (1997a, 1997b) Campbell and Muncer (1987), Campbell et al. (1992) and Paty (1998) all found similar sex differences in their research using the Expagg.

In the present study, no significant sex differences were found in the Spanish or Japanese samples.

The very clear expressive position of South African females may reflect a belief among young South African white females that their aggression is almost never legitimate or provoked, but rather as a result of some internal breakdown or loss of control (Glanz & Spiegel, 1996). The culture of patriarchy and authoritarianism which has dominated South African society, promoted the belief that authority and control naturally resided in men, as described by Cronje and Venter (1973), Duckitt (1983) and Lemmer (1989). This may have ensured that the sex-role and gender socialization of white South African

females remains rooted in traditional ways, that is, that women are passive, submissive and non-aggressive. In Hofstede's (1980) research on national cultures, South Africa emerges as a masculine country, where more traditional gender roles are eminant. Campbell (1999) accentuated the role of patriarchy in the stigmatisation of women's aggression, leading women to offer exculpatory accounts for their aggression. The clear instrumental position of the South African males can similarly be linked to the same social systems which have possibly lead South African females to believe their aggression is in violation of sex-appropriate behaviour. The patriarchal and authoritarianism systems validate and even valorise male power and aggression.

Further empirical evidence of traditional gender role beliefs and stereotypes have been found in research with young, white South African males and females. (Robinson, 1990; Dimati, 1998; Prinsloo, 1992; Epstein, 1998). Robinson revealed that typical young, white South African females are emotionally expressive, empathic, nuturant and caring, while the men are seen as independent, assertive and willing to engage in physical acts of aggression if provoked. Other South African researchers (Dimati, 1998; Prinsloo, 1992) also reported traditional gender roles for the white population, where aggressiveness was rated as socially highly undesirable for females but as a desirable characteristic for males.

An interesting, although non-significant, observation was the higher mean score of the Spanish females on the Instrumental scale than the Spanish males (see Table 1). They were the only group of females to score higher than the males on this scale. Hofstede (1996) suggests that a possible explanation may be that as Spain emerges as a more feminine country on the masculine-femininity dimension, one may expect a society in which social gender roles and values overlap, where both males and females are supposed to be modest, tender and concerned with the quality of life. It therefore seems

possible that females may hold social representations of aggression that have to do with the use of aggression to exercise control triggered by challenges to their self-esteem or integrity, just as Spanish males may be likely to view their aggression as the result of a loss of control resulting from a build up of stress. Arrindell et al. (1997) also found the equitable presence of both masculine and feminine traits in Spanish male and female students. The results of the present study appear to confirm observations by Frodi, Macauley and Thome (1977) that traditional sex role requirements can be negated as hard and fast rules, by situational factors or relearning, by those who cast off traditional views about proper roles and behaviours for men and women.

Inter-culturally, significant results indicate that Japanese males held a more instrumental social representation of aggression than Spanish and South African males. This is in accordance with Andreu et al. (1998) who also found higher instrumental scores for Japanese males compared to Spanish males. According to Hofstede (1996), Japan is rated as a highly masculine country (more so than South Africa and Spain), where the emphasis on achievement and related masculine qualities may be comparable with an instrumental representation of aggression. Ramirez et al. (1996) also mentioned Japan's history of violent conflict, which may have lead to cultural patterns which serve to promote group solidarity at the expense of interpersonal or within group harmony. The South African males scored significantly higher on the expressive scale than the Japanese males. This finding also supports the more extreme position of the Japanese males regarding their social representation of aggression as being masculine (instrumental).

The South African females scored significantly higher on the expressive scale and significantly lower on the instrumental scale than the Spanish and Japanese females. One possible explanation suggest more guilt and anxiety about their aggression among

South African females, as compared with the other two groups of females (Glanz & Spiegel, 1996). There is also a suggestion that the South African white females have more traditional gender roles and negative attitudes towards aggression, which is perpetuated by the patriarchal and authoritarian systems common in South African society (Cronje & Venter, 1973; Duckitt, 1983; Lemmer, 1989; Prinsloo, 1992). On the other hand, Spanish and Japanese females may be experiencing a society where less traditional gender role behaviour is expected (Hofstede, 1996; Ramirez, 1993; Shirakawa et al., 1992; Suzuki, 1991), encouraging less submissiveness and the more open expression of feelings of aggression. The higher scores on instrumental social representations by the Spanish females are also in agreement with Gilmore (1990) who found them to posess power and control in the domestic arena that attributed to the fact that they offer less exculpatory accounts for their own aggression.

It was expected that significant cultural and sex differences would exist relating to physical aggression, verbal aggression, anger and hostility. This hypothesis was partialy supported. Intra-culturally, the finding of more self-reported physical aggression in Spanish and South African males than Spanish and South African females is in accordance with similar findings of Andreu et al. (1998) and Ramirez (1996) who compared physical aggression amongst Spanish students. Research by Botha and Mels (1990) also showed more physical aggression over time among South African white adolescent males than females. Campbell (1999) focus on the evolutionary perspective and explains more physical aggression in males as compared with females to be related to the relative costs (injury) and benefits (rewards such as status) of aggression for each sex, where the benefits outweigh the costs for males.

No significant inter-cultural differences were found between males regarding physical aggression. This result agrees with previously replicated findings (Eagly & Steffen,

1986; Geen & Donnerstein, 1983) which show that physical aggression is both more frequent and more severe among males than among females, but it is not a universal truth: it does not hold for all cultures. Perhaps, the most important result according to an evolutionay standpoint was that, whereas there was no difference between males of all three cultures for physical aggression, Japanese females reported significantly more physical aggression than Spanish and South African females. A possible explanation of these results may be that biological factors such as testosterone play a more important role in regulating physical aggression in males, while cultural factors, for example, specific gender roles, may be more important in the regulation of physical aggression in Japanese females (Andreu et al., 1998; Fujihara et al., 1999). Shirakawa et al. (1992) and Suzuki (1991) also provide evidence for the emergence of more liberated gender roles for women in Japan. These changing roles may be accompanied by a shift from the traditional female response of submission and passivity to a more physical response to aggression that is also in accordance with the rating of Japan as the most masculine (instrumental representation) country in the world (Hofstede, 1996). Once again, the argument that the nature of the social construction in South Africa, in contrast to that of Japan, creates an environment where the acceptability of women behaving in a way that may be construed as masculine (as in the expression of aggressive traits), is less tolerable, may serve to explain the present finding.

No significant sex differences were found within any culture on the Verbal aggression subscale. Inter-culturally, Spanish and Japanese females reported significantly more verbal aggression than South African females. These results suggest that differences in culture may be linked to societal regulations. Ramirez et al. (1996) comments that emotionality and the open (verbal) expression thereof is stereotypical of Latin (Spain) societies. The higher verbal-aggression for Japanese females than the South Africans

are reflected in the Fujihara et al. (1999) study, where interdependent cultures, like the Japanese, are more permisive to the expression of emotions related to anger than independent cultures. Lower levels of verbal aggression reported by South African females may further be explained as traditional female gender role behaviour and linked to the systems of male dominance which make up the social fabric of South African society which label female verbal aggression as socially undesirable.

On the Anger subscale no significant intra-cultural sex differences were found. This in accordance with results from other studies where men and women typically did not differ on measures of anger (Andreu et al. 1998; Buss & Perry, 1992; Harris, 1997). Inter-culturally, the Spanish males and females reported more anger than the South African males and females. This behavioural display of the Spanish sample is characteristic of the expression of emotionality with a higher justification of emotionally motivated aggression (Ramirez et al., 1996). The South African's more conservative and reserved attitudes towards the public expression or even the feeling of anger (Hofstede, 1996) are in agreement with the present results.

On the Hostility subscale, no significant intra-cultural differences were found. Inter-culturally, both Spanish and Japanese males reported more hostility than the South African males. Spanish and Japanese females reported more hostility than South African females. Although Hofstede's (1996) value dimension of masculinity may partially explain the higher levels of hostility in Spain and Japan, other cultural and intrapsychic factors may help to explain these differences. Reference to the previously discussed social systems operating in the South African context (white population), which serve to regulate the expression of aggression, in contrast to the more progressive and liberated gender roles in Spain and Japan, may also explain this finding.

In summarizing the results on the two different aggression inventories the cultural and sex differences were as predicted and replicated across the three culturally different samples. Consistantly with previous reports females showed higher expressive scores than males. This pattern of sex differences is primarily understood through evolutionary models of sexual selection and differential male-female parental investment. Inter-culturally the very clear expressive representation of both the South African males and females compaired to Spain and Japan, accompanied also by lower instrumental representations, suggest appropriate gender roles maintained by a patriarchal and authoritarian society.

Results further revealed that the only type of aggression which yielded significant sex differences (intra-cultural) was Physical aggression. The finding of more physical aggression among males than females in two (South Africa and Spain) of the three cultural groups, provides support for the empirical evidence and anecdotal belief that the male of the species is more physically aggressive than the female. However, the most salient finding of the present study (inter-cultural) was the lower overall self-reported aggression of the South African females in comparison with the Spanish and Japanese females, which is especially interesting in light of the increasing violence against women in South Africa. Other South African researchers also found low levels of self-reported aggression among young white South African females. This low self-reported aggression of South African females begs the question of whether they actually experience less anger, hostility, and express less verbal and physical aggression, or whether they simply fail to communicate those feelings and acts. This result may have been different if the sample of South African females in the present study was more representative of all South African females, where aspects such as socio-economic status, may well have an impact on one's experience and exposure to

violence and thereby also shape one's attitudes and expression of aggression. The aforementioned role of the systems of patriarchy and authoritarianism in South Africa, which have undoubtedly shaped gender role behaviours and attached values to male and female aggression, may be the most important cultural factor connected to this finding. In addition, the transformation in the social and political conditions that have had a pervasive effect on the power dynamics within all areas of South African society would be expected to explain at least some of the differences in the expression of aggression between Spanish, Japanese and South African females.

Finally it was hypothesised that significant intercorrelations will be found between the social representations of aggression and the different aggression types. The findings of the present study supported this hypothesis. This is in accordance with the findings of Archer and Haigh's (1997a) study, comparing representations of aggression and types of self-reported aggression, as well as their study utilising a prisoner sample.

The significant negative correlation between the Instrumental and Expressive scales of the Expagg separates these as two distinct ways of cognitively organising people's understandings and beliefs about aggression. This negative correlation also suggests that the Instrumental and Expressive scales form opposite ends of a continuum, providing further evidence of the value of this instrument in examining individual's' social representations of aggression.

All the scores on the Aggression Questionnaire were significantly and positively correlated with the total Instrumental score of the Expagg. It was predicted by Archer and Haigh (1997a, 1997b) that high Instrumental scores would correlate positively with greater levels of self-reported aggression. The present findings suggest that the Instrumental scale and the four subscales of the Aggression Questionnaire measure similar aggressive dispositions and behaviours.

The finding that the total Expressive score were significantly and positively correlated with Verbal aggression, Anger and Hostility but not with Physical aggression, is supported by the findings of Andreu et al. (1998) but differs from Archer and Haigh (1997a), where the Expressive scores were not positively correlated with any of the subscales of the Aggression Questionnaire. In the present study, high Instrumental sores could only reliably predict self-reported Physical aggression and not Verbal aggression, Anger or hostility, due to the fact that Verbal aggression, Anger and Hostility were also significantly, positively correlated with the Expressive scores.

8. Conclusion and recommendations

- The results of the present study indicated that socio-cultural influences are indeed more predictive of aggression than sex as suggested in the literature. Culture plays an important role in determining how members of both sexes of a given nationality express their aggression. The present study reveals however that the influence of culture is not uniform on all the dimensions of aggression investigated.
- The findings of the present study, show that, in comparison with the Spanish and Japanese, the South African males and females held predominantly more distinct expressive social representations of aggression. Expressive representations are generally held by individuals who regard aggression as negative, dysfunctional and socially harmful. This finding is underscored by the patriarchal and authoritarian systems present in the South African social setting, which have shaped the expression of aggression among white males and females.
- The Spanish and Japanese societies may encourage less traditional and stereotypical behaviours and attitudes. As discussed, Spanish society, although arguably also influenced by patriarchy, has given women legitimate power on the domestic front, thereby potentially validating a more instrumental representation of

aggression for these women. Japan, although historically also authoritarian, appears to show the signs of rapid modernization, as the Japanese women are found to be less apologetic about their aggression than the South African females.

The following recommendations are noteworthy:

- The age of the participants in the present study requires comment and probably represents an important variable in concluding the results. The young age of most of the participants (mean age of 20.5 years), may have some impact on the high scores obtained on some of the scales, especially Physical aggression. Archer and Haigh (1997a,b) found that younger participants of both sexes showed higher scores on physical aggression, anger, hostility and instrumental representations, and lower scores on expressive representations. Goldstein and Ibaraki (quoted in Segall et al., 1999) also underscored the relationship between age and aggression. Dimati (1998) in her study of South African woman found significant interaction effects between age and gender role attitudes. This suggests that differences in social representations about aggression may extend beyond the concepts of culture and sex and include a variable such as age. Future research should include different age groups in order to facilitate broader generalizations.
- Further research on aggression in SA should include other subcultures to gain a more comprehensive perspective on the ethnical and cultural factors that influence aggressive behaviour. Robinson (1990) emphasised this need when he found that the typical gender behaviours of Xhosa speaking students differed from white students.

In conclusion, the present study highlighted the complexity of the interplay between biological and socio-psychological factors that contribute to the expression of aggression. It has also sensitized the researcher to the restrictions posed by

abstractions about social, cultural and political influences. Furthermore, this study has provided the prospect of an enhanced cross-cultural understanding of aggression, as well as the potentiality of a clearer delineation of aggression in the South African context.

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